

Work Order ID 81858

March-19-12 4:27:05 PM

81858

Page 1

Item ID: D350-636-018

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Skidtube w/ Training Wearplates. RH

Start Date: 19/03/2012 Start Qty: 1.00 *1*

Required Date: 02/04/2012 Req'd Qty: 1.00 *1*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/03/20 Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D4168	A
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IIN-D350-636	I
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100	0.00
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100

DOCUMENT CONTROL

DC

Document Control

0.00

Memo

Photocopy blue file and type labels per PPP D350-636-018 CHG 002

for MLJ 12-6-25
or chg 3 per ECN 12-542
(depends on D4151-CU1
Rev B or C)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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NR1

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NP2

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Page 3

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Stop

NS2

Start Date: 19/03/2012 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 02/04/2012 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

120

120

QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

BE 12/05/31

130

130

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S 12/05/31

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
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Page 4

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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140 Chemical Conversion Coat per QSI005 4.1 0.00

140

HandFinish

Hand Finishing

17KA 264

150 QC3 Inspect Part Finish 0.00

150

QC

Quality Control

① SAD 12-66-04

W/O:

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 5

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

160

Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1-Open up holes of Detail AB and ground handling to 0.625" (total of 8 holes per side) as per dwg D4168.

2-Open up holes of wearplate holes to 0.375" section CK-CK (total of 4 holes per side) 0.3125" holes section BC-BC (4 per side) as per dwg D4168.

3- Open float hole to 0.500" (4 per side)

4-Chamfer holes dwg D4168 (welding instructions on sheet 11)

5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R Sikaflex-291 batch: M121409
exp. date: 13-4-12

8- Weld spacers as per dwg D4168 & QSI004
(welding instructions on sheet 11)

A/R Aluminum Rod batch: M120164/m103953

9- Grind welds flush as per Dwg D4168

10-Spot face ground handling holes section (total of 4 places per side) as per dwg D4168

CF 12-6-4

BL12/06/13

JBL12/06/14

W/O:		WORK ORDER CHANGES						
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Page 6

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11- C'bore section CK-CK

12- Deburr holes

7/8/12/06/14

No

***** FOR DELUXE SKIDTUBE IF APPLICABLE DRILL TOW RING
HOLE IN TUBE *****

170

170

QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

S. J. Loebs

Memo

0.00

180

180

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S. J. Loebs

Memo

0.00

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March-19-12 4:27:05 PM

81858

Page 7

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--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

190 Pressure Wash per QSI005 4.3

0.00

1

MG 126-18

190

HandFinish

Hand Finishing

Memo

0.00

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

200

Powdercoat

Powder Coating

W121134

MF
12/06/18

Memo

10:20

0.00

START TIME:

3200

OVEN TEMPERATURE:

F

FINISH TIME:

10:50

210

QC3- Inspect Part Finish

0.00

210

QC

Quality Control

Memo

0.00

Inspect for foreign object per QSI 024

IX Ø

12/06/18

(ref) d M 12/06/18

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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Work Order ID 81858

March-19-12 4:27:05 PM

81858

Page 9

Item ID: D350-636-018**Accept*****N900040100*****Setup****Start*****NS1*****Revision ID:****Item Name:** Skidtube w/ Training Wearplates, RH**Stop*****NS2*****Start Date:** 19/03/2012 **Start Qty:** 1.00 ***1*****Cust Item ID:****Required Date:** 02/04/2012 **Req'd Qty:** 1.00 ***1*****Customer:****Reference:****Approvals:** **Process Plan:****Date:****Tooling:****Date:****Run****Start*****NR1*****QC:****Date:****SPC (Y/N):****Date:****Stop*****NR2*****Sequence ID/
Work Center ID**
240**Operation
Description**

QC5- Inspect part completeness to step on W/O

**Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

0.00

0.00

LR/4 PD 12-06-22

240

QC

Quality Control

250

Pick Kit

0.00

250

Packaging

Packaging

Memo

0.00

260

QC4- 100% Inspect kits for completeness

0.00

260

QC

Quality Control

Memo

0.00

*****ensure antiseize is on AN8C21A bolts*****

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
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March-19-12 4:27:05 PM

81858

Page 10

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						Stop	*NR2*
	QC:	Date:	SPC (Y/N):	Date:			

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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270

270

Packaging

Packaging

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

/X

SP

12-6-2012

280

280

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

12/4/2012

MF

12-06-2012

W/O:		WORK ORDER CHANGES						
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Picklist Print

March-19-12 4:27:10 PM

Page 1
BB

Work Order ID: 81858

81858

Parent Item: D350-636-018

D350-636-018

Parent Item Name: Skidtube w/ Training Wearplates, RH

Start Date: 19/03/2012

Required Date: 02/04/2012

Comments: IPP rev:A 10.09.28 new issue DD verf:EC
11.04.14 ecn11-553 DD verf:EC
NCR 11-906 DD verf:EC

IPP Rev:B
IPP Rev:C 11.10.18 as per

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3490-1		Manufactured	No			160	Each	37.0000	4	4	**		

D3490-1

Cross Bolt Spacer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG001	37	
62450	2	
74875	4	
77042	3	
78793	28	

AN3C34A

Purchased

No

AN3C34A
BOLT

230	Each	50.0000	1	1	**	1	12/06/22
<u>Location</u>							
ST353		50					

116075 ✓	30	
117514	20	

W/O:		WORK ORDER CHANGES							
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March-19-12 4:27:10 PM

Page 2

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Parent Item: D350-636-018

D350-636-018

Parent Item Name: Skidtube w/ Training Wearplates, RH

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C36A

Purchased No

230

Each

154.0000

4

4

**

4

(BP) 12/06/12

AN3C36A ✓

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	4	
101261	4	
ST353	150	
116590	0	
119083	2	
119324 ✓	53	
120641	40	
121013	55	

AN3C37A

Purchased No

230

Each

207.0000

1

1

**

LJ

AN3C37A

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST354	207	
116874	11	
117010	2	
120422	44	
120731	50	
121068	100	

12/06/12

AN3C42A

Purchased No

230

Each

40.0000

1

1

**

12/11/13

LJ

AN3C42A

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST354	40	
106176	1	
119673	14	
120464	25	

W/O:		WORK ORDER CHANGES							
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March-19-12 4:27:10 PM

Page 3

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D350-636-018

Parent Item: D350-636-018

Parent Item Name: Skidtube w/ Training Wearplates, RH

Start Date: 19/03/2012

Required Date: 02/04/2012

D3488-042

Manufactured No

230 Each 19.0000

1 1

**

D3488-042

Blade Fitting Assembly, RH

(SP)

13/06/22

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	83417	19
62003	1	
75068	9	
77015	9	

D3490-5

Manufactured No

230 Each 45.0000

4 4

**

D3490-5

Cross Bolt Spacer

BS 12/06/11

383373 *

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	25	
78958	25	
LG001	20	
59230	20	

D3492-1

Manufactured No

230 Each 122.0000

8 8

**

D3492-1

Plug

BS 14/06/20

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	83259	122
69531	8	
74444	2	
76235	12	
77037	100	

D3492-5

Manufactured No

230 Each 32.0000

8 8

**

D3492-5

Plug

BS 12/06/20

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	83100	32
77044	32	

W/O:		WORK ORDER CHANGES							
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March-19-12 4:27:10 PM

Page 4

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Parent Item Name: Skidtube w/ Training Wearplates, RH

81858
D350-636-018

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3873-1

Manufactured No

230

Each

151.0000

7

7

**

7

(2)

12/06/22

D3873-1

Bushing

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST057	105	
79561	105	
ST067	46	
64760	1	
68247	4	
73829	19	
73830	2	
79560	20	

D4154-041

Manufactured No

230

Each

1.0000

1

1

**

1

(2)

12/06/22

D4154-041

Wearplate Assembly

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	1	
77007	1	

D4170-1

Manufactured No

230

Each

9.0000

4

4

**

1

*BE 12/06/11
B 82043 24*

D4170-1

Bushing

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG001	9	
71844	5	
76677	4	

D4171-1

Manufactured No

230

Each

7.0000

1

1

**

E

(2)

12/06/22

D4171-1

Bushing

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST135	7	
77008	7	

82385 1

W/O:		WORK ORDER CHANGES							
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NOTE: Date & initial all entries

Picklist Print

March-19-12 4:27:10 PM

Page 5

Work Order ID: 81858

81858
D350-636-018

Parent Item: D350-636-018

Parent Item Name: Skidtube w/ Training Wearplates, RH

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

MS21043-3

Purchased No

230 Each

793.0000

5 5

**

5

(SP) 12/06/22

Nut

MS21043-3 ✓

<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>
FG	118075	72	
	103691	72	
GA		304	
	120693	304	
ST301		417	
	118077	2	
	118614 ✓	365	
	118686	30	
	119758	20	

NAS1149C0363R

Purchased No

230

Each 3,373.0000

9

9

**

(SP) 12/06/22

Washer

NAS1149C0363R ✓

<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>
ST297		3373	
	114742 ✓	3373	

NAS1515H3L

Purchased No

230

Each 180.0000

4

4

**

(SP) 12/06/22

*NAS1515H3I *

WASHER

<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>
FG		40	
	102472	40	
ST277		140	
	118686	3	
	119438	1	
	120072	36	
	120360	100	

121556 ✓

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-19-12 4:27:10 PM

Page 6

Work Order ID: 81858

81858
D350-636-018

Parent Item: D350-636-018

Parent Item Name: Skidtube w/ Training Wearplates, RH

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-005

Purchased

No

230

Each

204.0000

8

8

**

Q

(P)

12/06/20

NAS1611-005

O-RING

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	204	
106099	31	
114220✓	105	
119438	68	

NAS1611-010

Purchased

No

230

Each

201.0000

8

8

**

Q

(P)

12/06/20

NAS1611-010

O-RING

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP 121723✓	50	
110915	0	
120770	50	
FP001	151	
110915	14	
117460	8	
118077	1	
118612	3	
119438	47	
120308	28	
120986	50	

NAS1149D0863J

Purchased

No

250

Each

227.0000

2

2

**

Q

120308

C/P/K/20 (P)

NAS1149D0863J

WASHER

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST298	227	
118078	36	
119307	91	
120308	100	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-19-12 4:27:10 PM

Page 7

Work Order ID: 81858

81858

Parent Item: D350-636-018

D350-636-018

Parent Item Name: Skidtube w/ Training Wearplates, RH

Start Date: 19/03/2012

Required Date: 02/04/2012

D2744

Manufactured No

110

Each

57.0000

1

1

**

D2744

Cap

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG002	57	
62715	1	
70881	9	
71861	5	
78900	42	

D2600-3-BENT

Manufactured No

110

Each

22.0000

1

1

**

D2600-3-BFNT

Extrusion Bent

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	22	
66875	7	
73253	1	
75021	1	
75022	1	
75023	1	
81330	11	

D2743

Manufactured No

160

Each

224.0000

8

8

**

D2743

Crossbolt Spacer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG001	224	
67766	4	
68251	3	
73403	64	
74445	1	
78603	52	
79517	100	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-19-12 4:27:10 PM

Page 8

Work Order ID: 81858

81858

Parent Item: D350-636-018

D350-636-018

Parent Item Name: Skidtube w/ Training Wearplates, RH

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

D2739

Manufactured

No

160

Each

7.0000

1

1

**

CF 126-4

D2739

350 I Beam

B8347

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	7	
72155	1	
80083	6	

ALS4-1032-225

Purchased

No

230

Each

1,056.000

4

4

**

4 (PP) 12/06/20

AI S4-1032-225

Insert

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST281	1019	
108696	146	
110768	62	
118386	55	
118966	68	
120671	688	
ST282	37	
120410	24	
120451	13	

AN8C35A

Purchased

No

230

Each

64.0000

1

1

**

(PP) 12/06/22

AN8C35A ✓

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	63	
115960	1	
117834	10	
118286 ✓	52	
ST346	1	
114442	0	
115188	0	
115960	1	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-19-12 4:27:10 PM

Page 9

Work Order ID: 81858

81858

Parent Item: D350-636-018

D350-636-018

Parent Item Name: Skidtube w/ Training Wearplates, RH

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN6C44A

Purchased

No

230

Each

103.0000

4

4

**

4

(2P)

12/06/20

AN6C44A

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FG	121440	2
	103964	2

ST343	101	
-------	-----	--

	120095	8
--	--------	---

	120143	25
--	--------	----

	120465	27
--	--------	----

	120641	21
--	--------	----

	121013	20
--	--------	----

MS21083C8

Purchased

No

230

Each

80.0000

1

1

**

1

(2P)

12/06/22

MS21083C8

NUT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP002	121185	1
	115884	1

ST303	13	
-------	----	--

	115884	0
--	--------	---

	118077	1
--	--------	---

	119309	2
--	--------	---

	119436	8
--	--------	---

	119638	2
--	--------	---

ST304	66	
-------	----	--

	120142	16
--	--------	----

	120731	25
--	--------	----

	121011	25
--	--------	----

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-19-12 4:27:10 PM

Page 10

Work Order ID: 81858

Parent Item: D350-636-018

Parent Item Name: Skidtube w/ Training Wearplates, RH

81858
D350-636-018

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3631-1

Manufactured

No

230

Each

207.0000

8

8

**

1

(DP)

12/06/20

D3631-1

Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST072	207	
68062	2	
75548	205	

AN960C10L



NAS1149C0332 ✓ Purchased

R

No

230

Each

0.0000

4

4

**

1

(DP)

12/06/20

*AN960C10I *

washer

D2745

Manufactured

No

230

Each

128.0000

8

8

**

8

(DP)

12/06/20

D2745

Bushing

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	83260 ✓	
79518	100	
FP001	100	
69529	28	
76142	1	
78597	1	
	26	

NAS1149C0832R

Purchased

No

230

Each

303.0000

1

1

**

1

(DP)

12/06/22

NAS1149C0832R ✓

WASHER

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST297	303	
114915 ✓	303	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-19-12 4:27:10 PM

Page 11

Work Order ID: 81858

81858

Parent Item: D350-636-018

D350-636-018

Parent Item Name: Skidtube w/ Training Wearplates, RH

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C6A

Purchased No

230

Each

579.0000

4

4

**

4

(P)

12/06/22

AN3C6A ✓
BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	121682✓	
	1	
111982	1	
ST351	578	
111982	2	
116419	23	
116549	2	
116704	12	
117619	10	
117688	1	
117872	5	
118422	13	
119449	21	
120423	89	
120693	400	

MS21043-6

Purchased No

230

Each

805.0000

4

4

**

4

(D)

12/06/20

MS21043-6
NUT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	20	
103693	20	
ST301	785	
112314	79	
117887	6	
118384✓	200	
120308	500	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-19-12 4:27:10 PM

Page 12

Work Order ID: 81858

81858
D350-636-018

Parent Item: D350-636-018

Parent Item Name: Skidtube w/ Training Wearplates, RH

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3493-1

Manufactured No

250

Each

62.0000

2

2

**

82023

L8P

D3493-1

Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST050	62	
70697	2	
77573	20	
78835	40	

MS21083C8

NUT

Purchased No

250

Each

80.0000

2

2

**

A1121308 C 8P
m121349 8P

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP002	1	
115884	1	
ST303	13	
115884	0	
118077	1	
119309	2	
119436	8	
119638	2	
ST304	66	
120142	16	
120731	25	
121011	25	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-19-12 4:27:10 PM

Page 13

Work Order ID: 81858

81858

Parent Item: D350-636-018

D350-636-018

Parent Item Name: Skidtube w/ Training Wearplates, RH

Start Date: 19/03/2012

Required Date: 02/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN8C21A

Purchased No

250

Each

67.0000

2

2

**

121270

L
S
Q

BOLT

AN8C21A

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST343	67	
118758	5	
120094	38	
120872	4	
121067	20	

D2741

Manufactured No

250

Each

33.0000

1

1

**

78016

C
12/12/2010

D2741

Blade, 350 Skidtube

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST	-10	
ST466	43	
71856	1	
76984	32	

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X		D4168-043	350 SKIDTUBE ASSEMBLY, LH
		X		D4168-044	350 SKIDTUBE ASSEMBLY, RH
D				1 1 1 1 D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1		1		D3488-041	BLADE FITTING, LH
	1	1	1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
8	8	8	8	D3631-1	WASHER
7	7	7	7	D3873-1	BUSHING
1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
1				D4168-1	SKIDTUBE WELDMENT, LH
	1			D4168-2	SKIDTUBE WELDMENT, RH
		1		D4168-3	SKIDTUBE WELDMENT, LH
			1	D4168-4	SKIDTUBE WELDMENT, RH
4	4	4	4	D4170-1	SPACER
1	1	1	1	D4171-1	BUSHING
				4 4 4 4 ALS4-1032-225	INSERT
4	4	4	4	AN3C6A	BOLT
1	1	1	1	AN3C34A	BOLT
4	4	4	4	AN3C36A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
9	9	9	9	AN960C10	WASHER (OR NAS1149CO363R)
4	4	4	4	AN960C10L	WASHER (OR NAS1149CO332R)
1	1	1	1	AN960C816L	WASHER (OR NAS1149CO832R)
5	5	5	5	MS21043-3	NUT
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- 1) MATERIAL: MAKE D4168-1/2-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH:
CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
- 3) BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: N/A
- 7) IDENTIFICATION: N/A
- 8) WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- 9) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 10) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 11) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

WORK ORDER
NO. 81858 *MLJ*
12/03/20

RELEASED
R 2010-09-15

A	NEW ISSUE	SC	10.08.09
REV.		BY	DATE
DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4168	SHEET 1 OF 11
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	350 SKIDTUBE ASSEMBLY	NTS
DATE	10.08.09	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

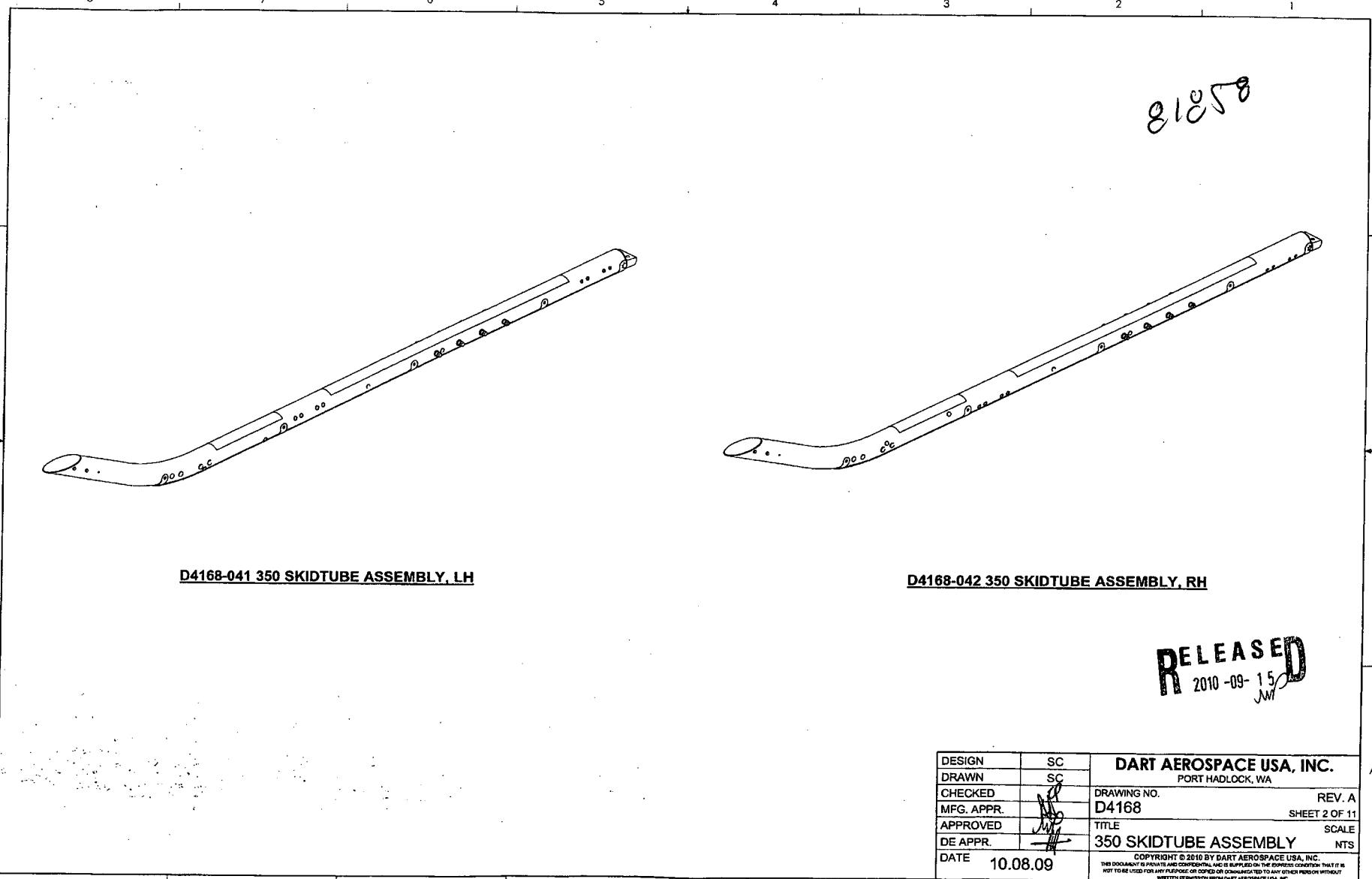
W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D

D

C

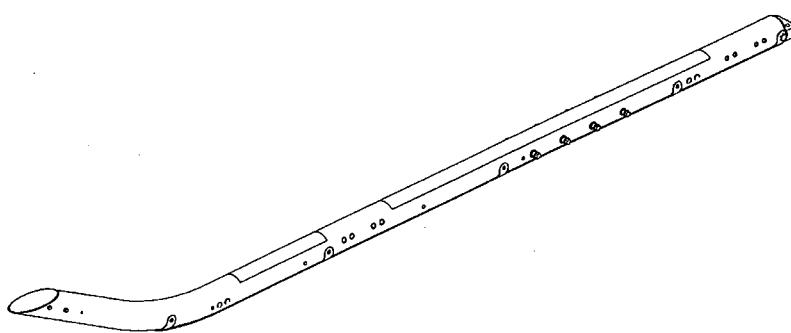
C

B

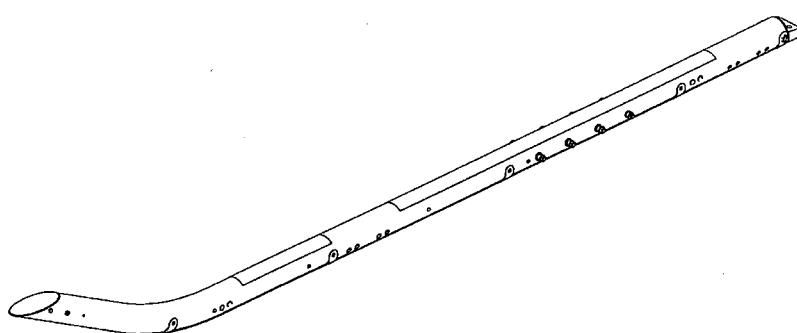
B

A

A



D4168-043 350 SKIDTUBE ASSEMBLY, LH



D4168-044 350 SKIDTUBE ASSEMBLY, RH

RELEASED
2010-09-15
NP

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	
MFG. APPR.		D4168	
APPROVED		REV. A	
DE APPR.		SHEET 3 OF 11	
DATE	10.08.09	TITLE	SCALE
		350 SKIDTUBE ASSEMBLY	NTS
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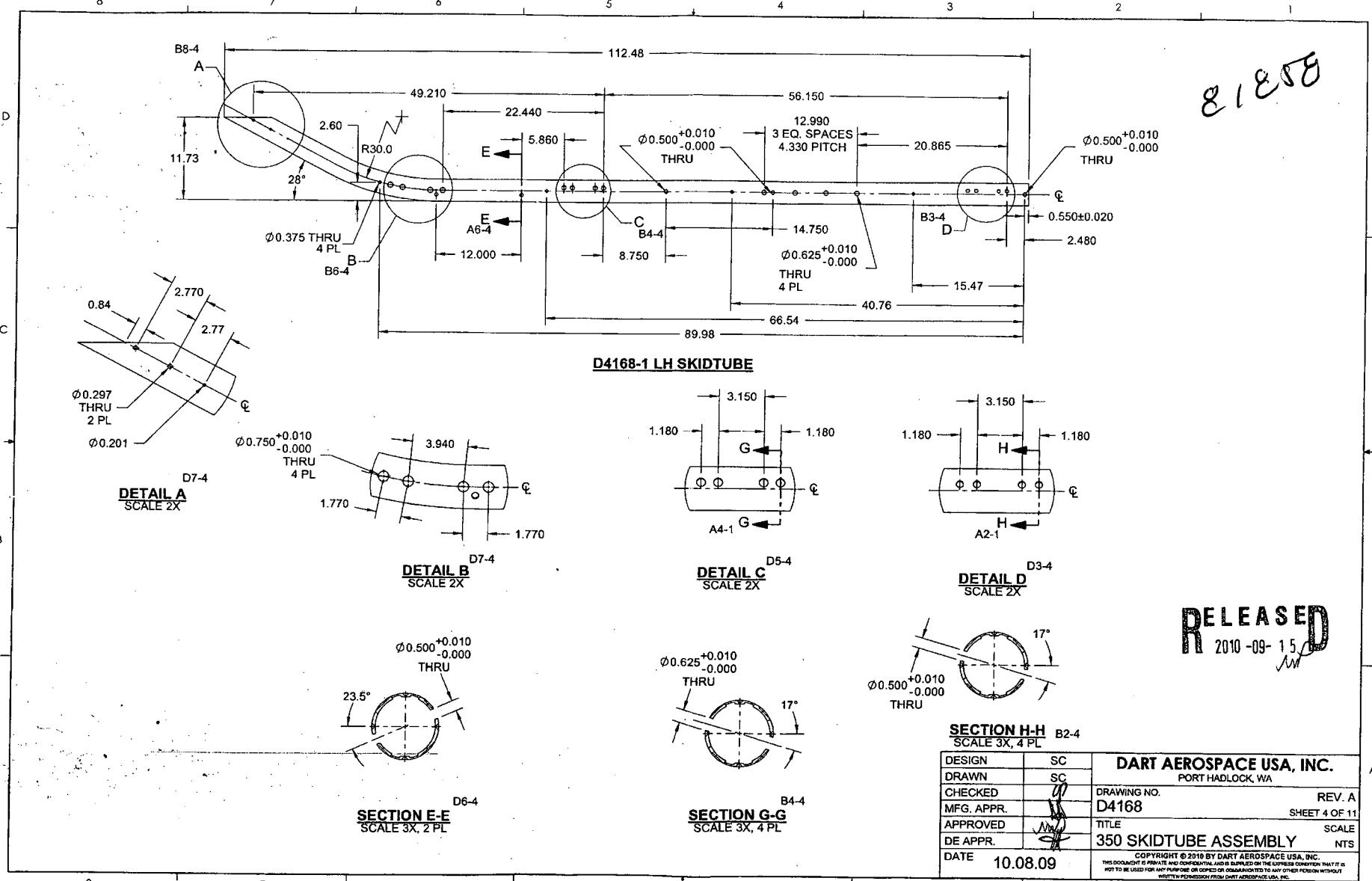
W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DART AEROSPACE USA, INC.	
	PORT HADLOCK, WA
DRAWN	SC
CHECKED	WJ
MFG. APPR.	WJ
APPROVED	WJ
DE APPR.	WJ
DATE	10.08.09
DRAWING NO.	D4168
REV. A	
TITLE	350 SKIDTUBE ASSEMBLY
SCALE	NTS
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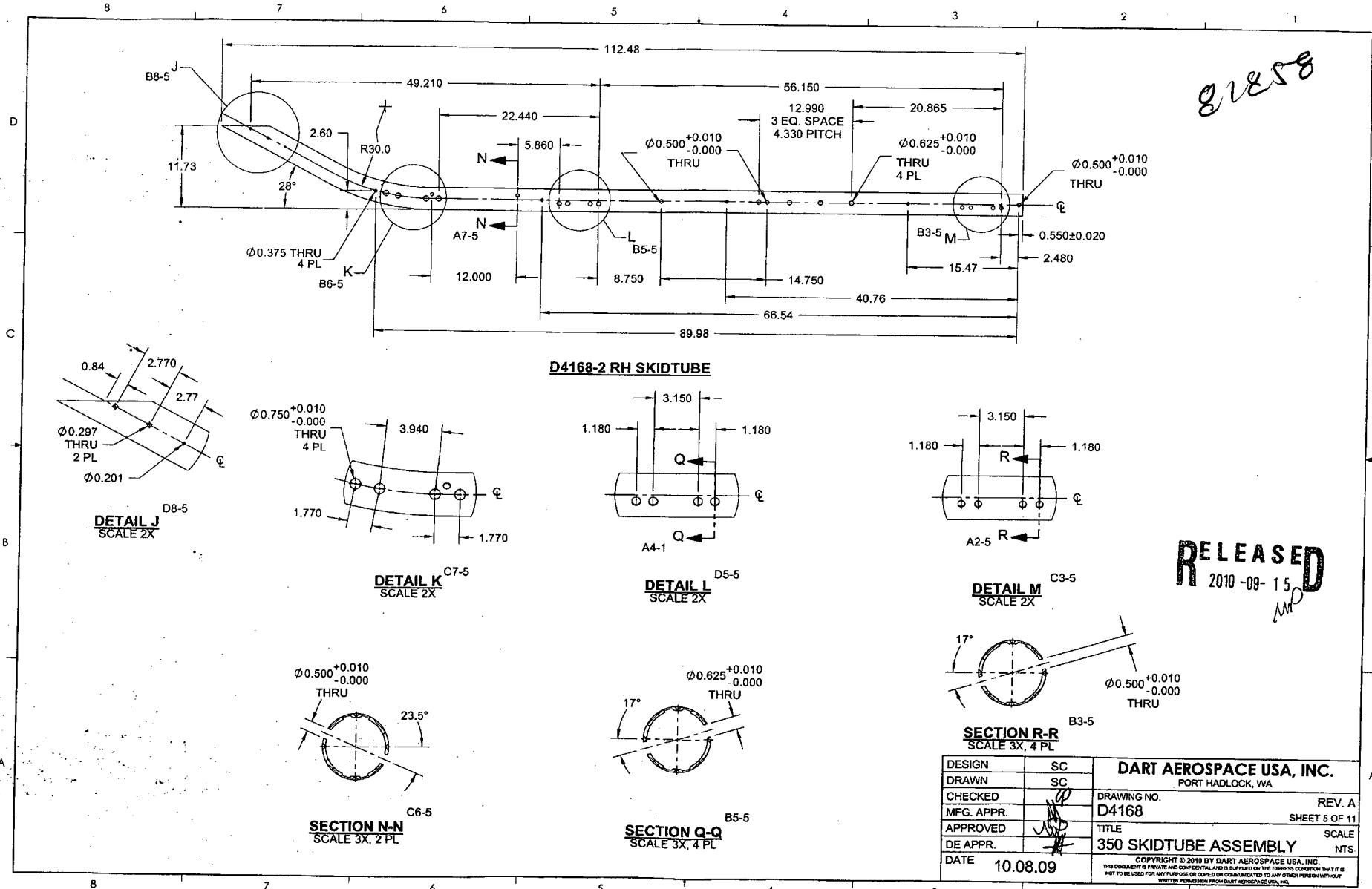
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2010-03-15

2010-09-15
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CHECKED	<i>[initials]</i>	DRAWING NO.	REV. A	
MFG. APPR.	<i>[initials]</i>	D4168	SHEET 5 OF 11	
APPROVED	<i>[initials]</i>	TITLE	SCALE	
DE APPR.	<i>[initials]</i>	350 SKIDTUBE ASSEMBLY	NTS	
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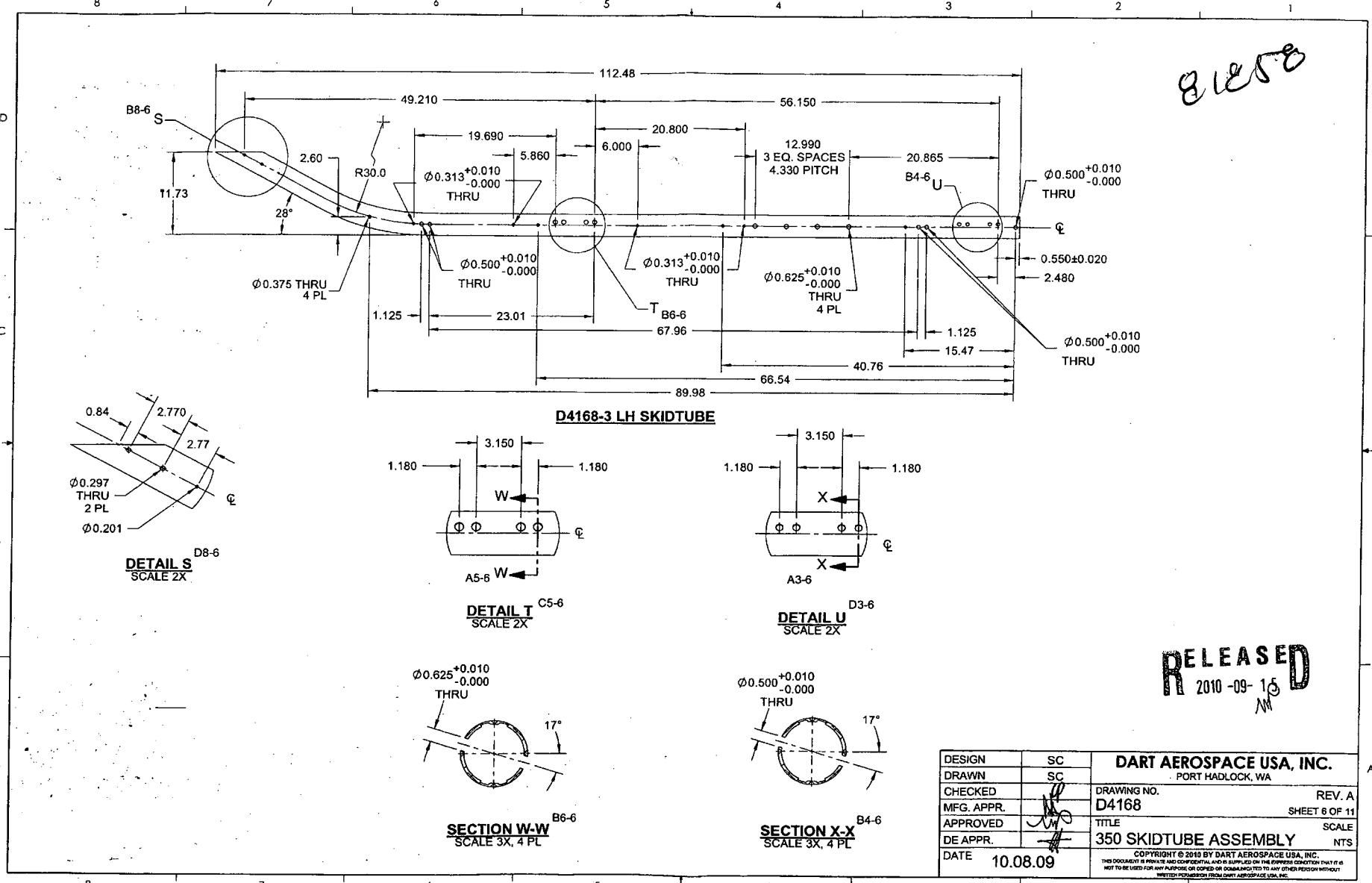
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DESIGN	SC	DART AEROSPACE USA, INC.
DRAWN	SC	PORT HADLOCK, WA
CHECKED	W	DRAWING NO. D4168
MFG APPR.	N	REV. A
APPROVED	JW	SHEET 6 OF 11
DE APPR.	W	TITLE 350 SKIDTUBE ASSEMBLY
DATE	10.08.09	SCALE NTS

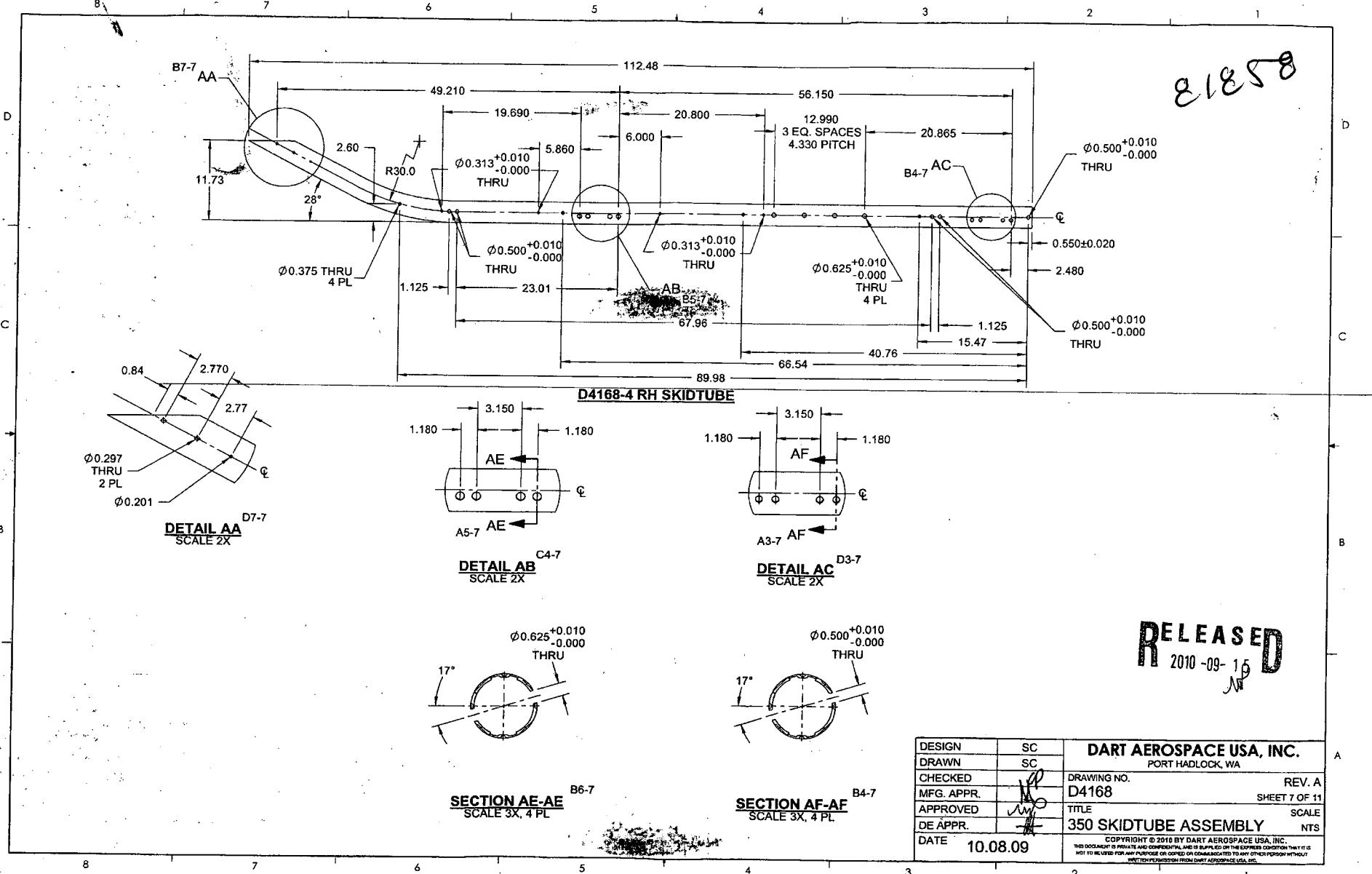
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NOTE: Date & initial all entries



1858

RELEASED
2010-09-15
M

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	<i>PP</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>PP</i>	D4168	SHEET 7 OF 1
APPROVED	<i>JW</i>	TITLE	SCALE
DE APPR.	<i>PP</i>	350 SKIDTUBE ASSEMBLY	NTS
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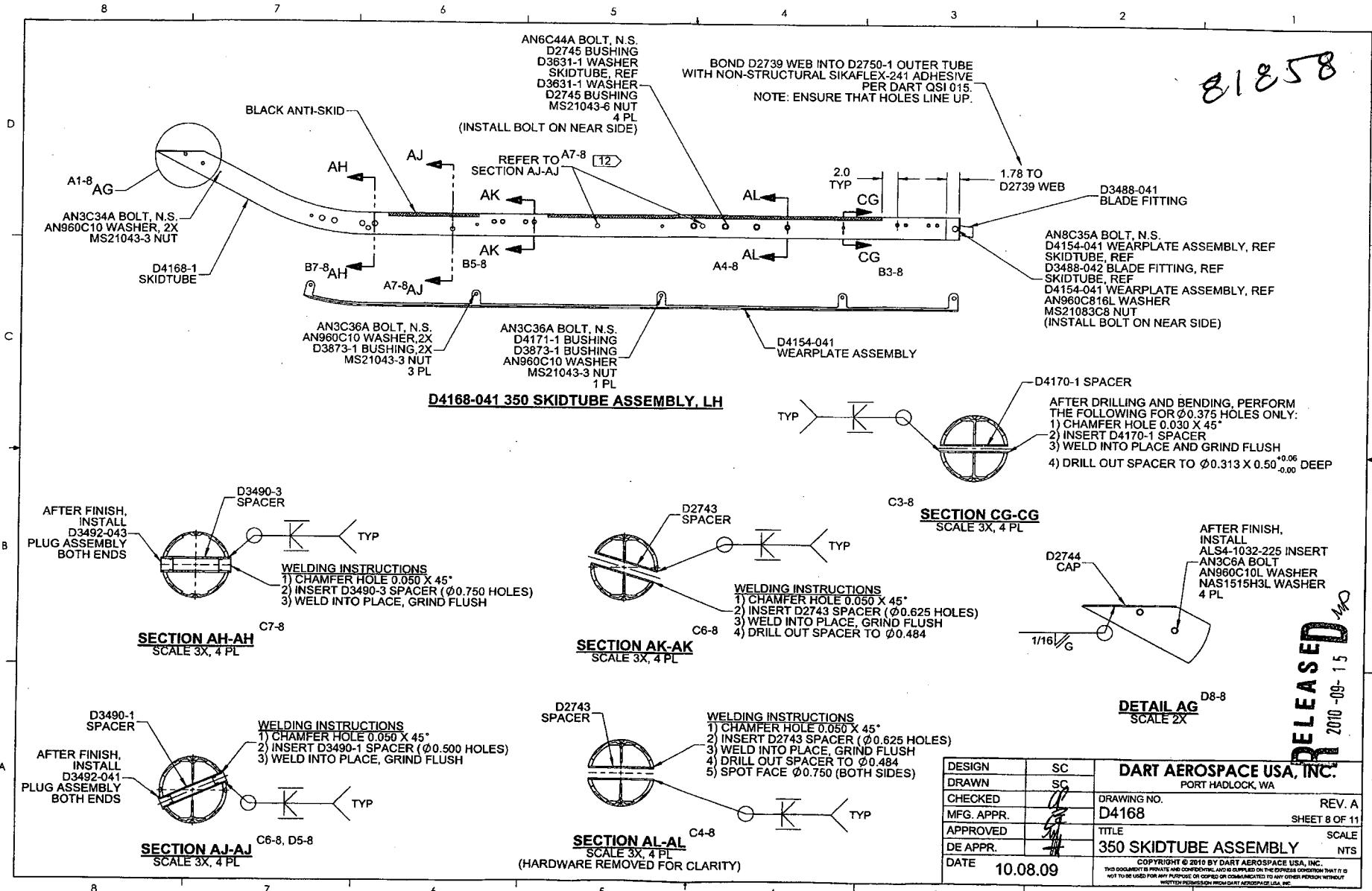
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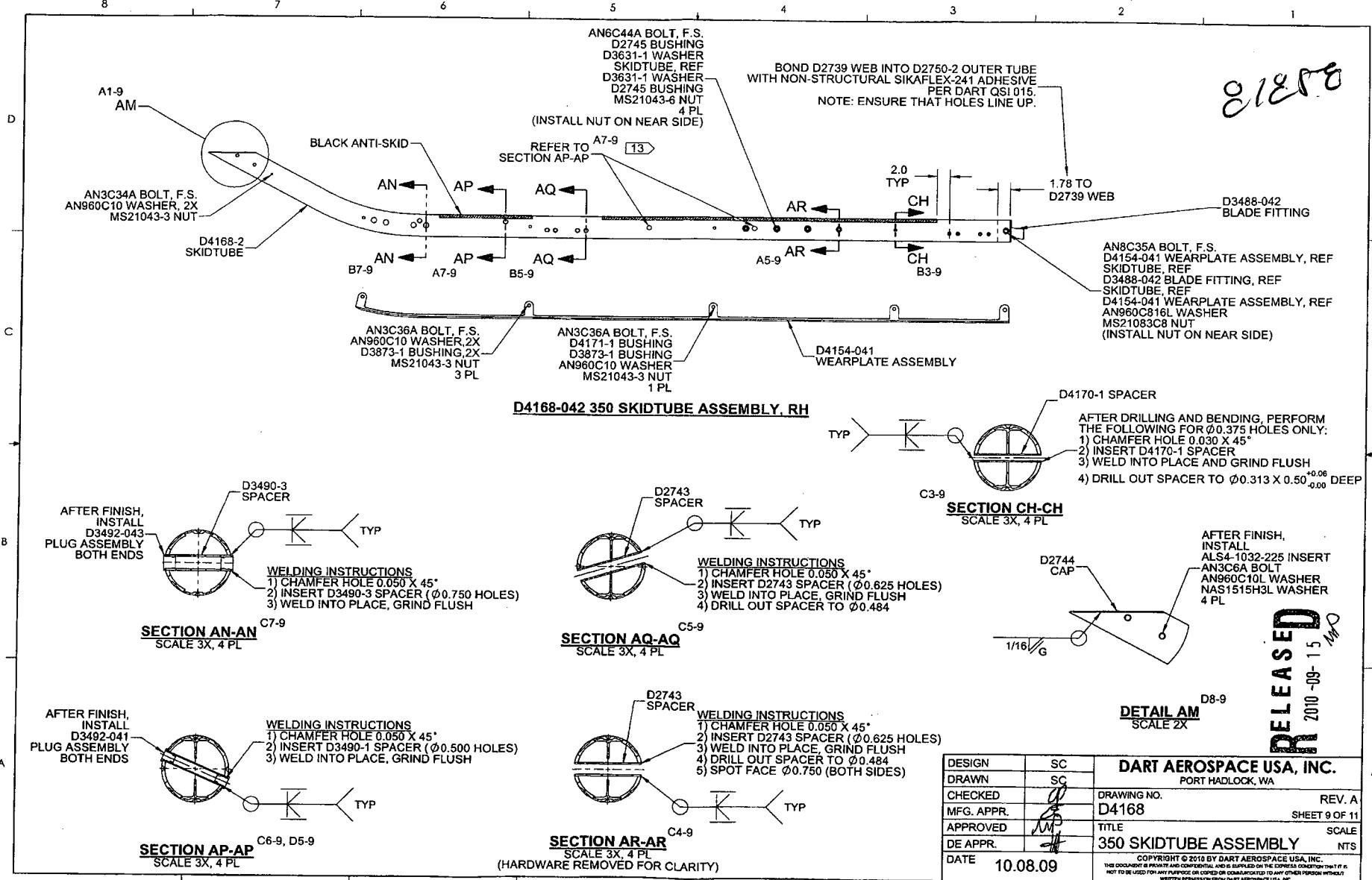


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NOTE: Date & initial all entries



3188

32-225 INSERT
BOLT
10L WASHER
5H3L WASHER

DESIGN	SC	DART AEROSPACE USA, INC. PORT HADLOCK, WA		
DRAWN	SC			
CHECKED	DP	DRAWING NO.	REV. A	
MFG. APPR.		D4168	SHEET 9 OF 11	
APPROVED	MP	TITLE	SCALE	
DE APPR.	#	350 SKIDTUBE ASSEMBLY	NTS	
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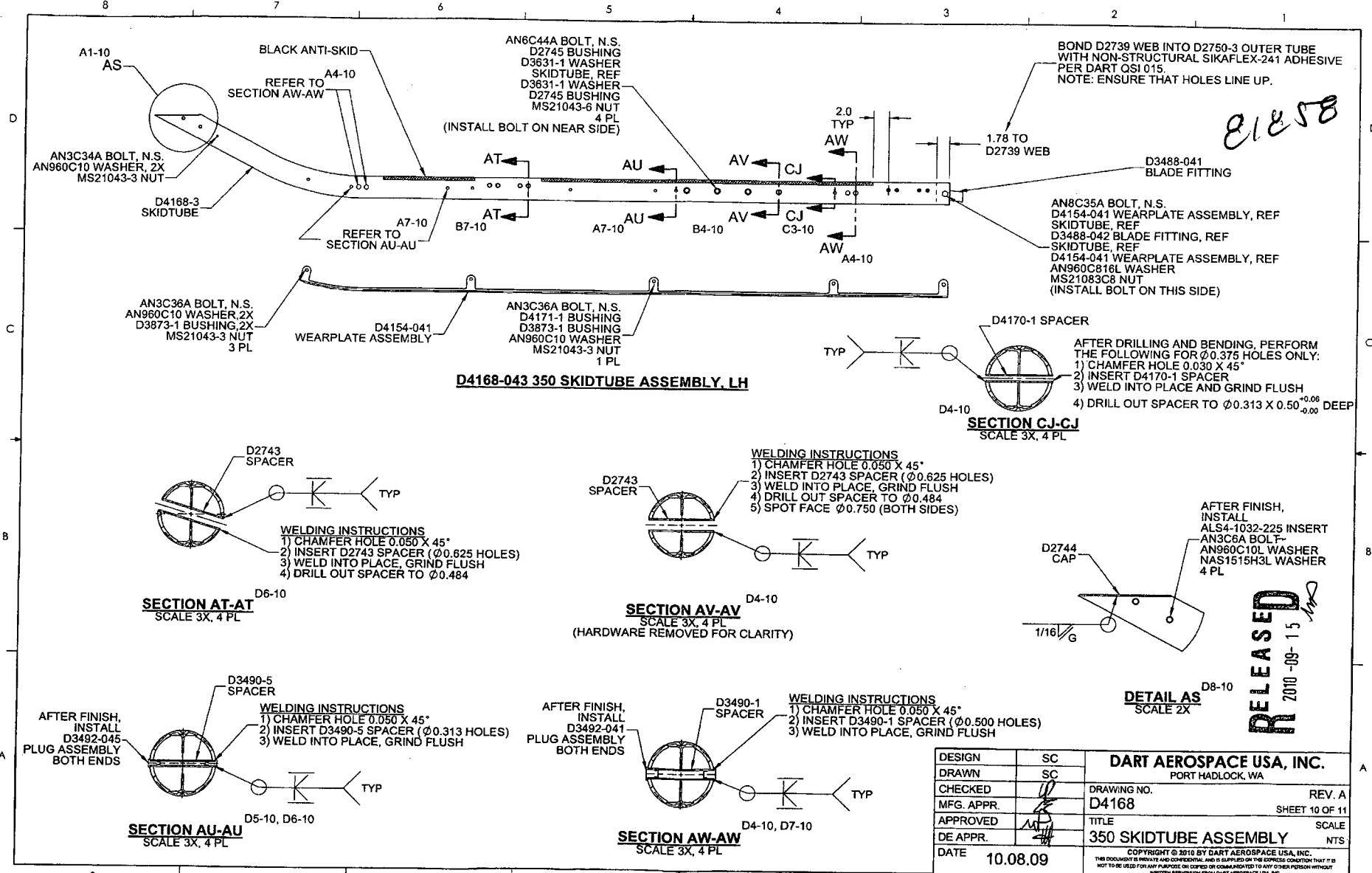
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MFG. APPR.	<i>LL</i>	D4168	SHEET 10 OF 11	
APPROVED	<i>ML</i>	TITLE	SCALE	
DE APPR.	<i>LL</i>	350 SKIDTUBE ASSEMBLY	INCHES	
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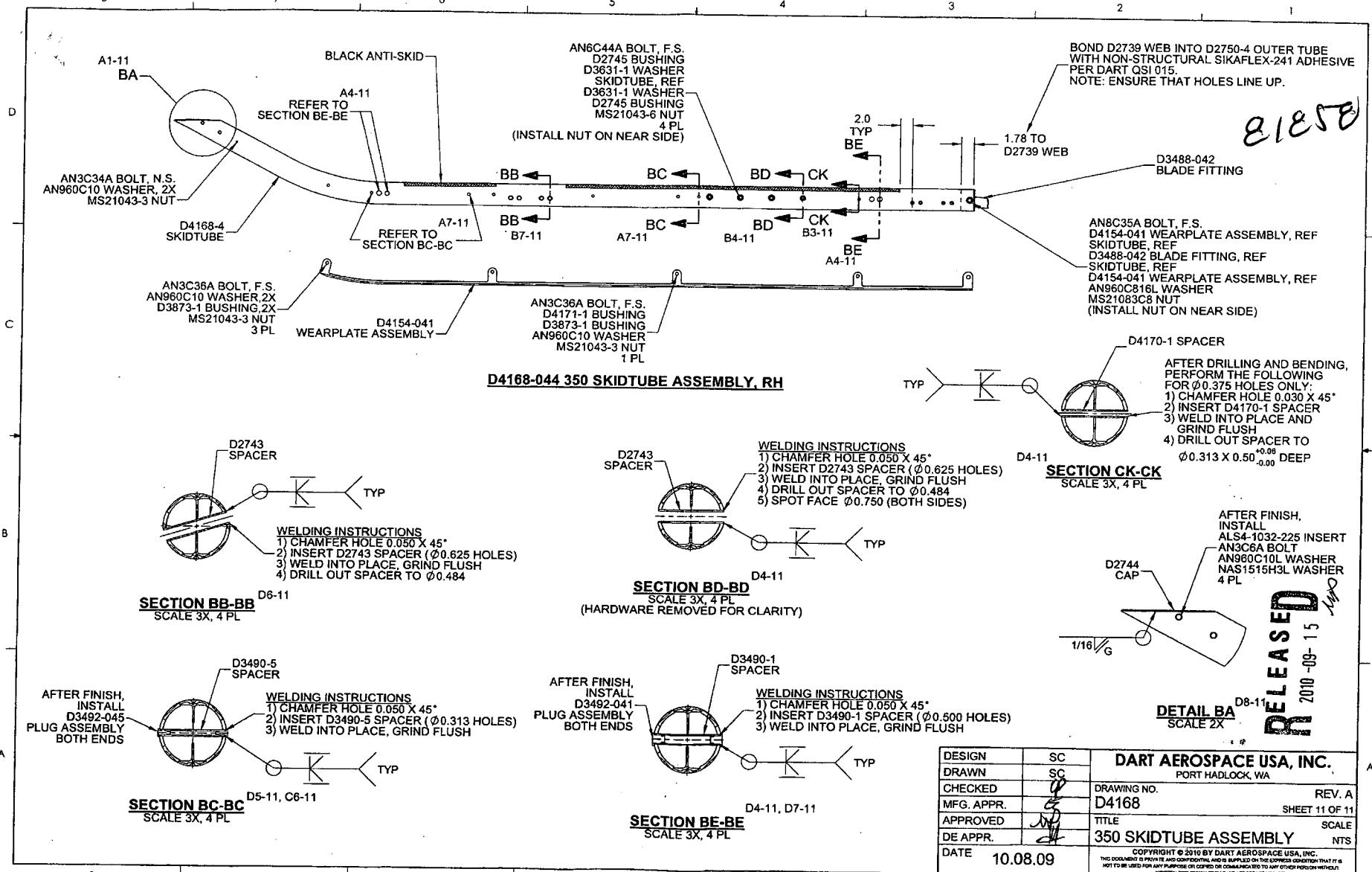
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C	DART AEROSPACE USA, INC.		
C	PORT HADLOCK, WA		
DRAWING NO.	REV.		
D4168			SHEET 11 OF
TITLE	SCALE		
350 SKIDTUBE ASSEMBLY	NT		
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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NO. 294

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 83800
Part number: A350-636-012
Description: Skidtube
Welding Process: Tig[] Mig[]
Base material: Alum
Current: AC[] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[] fail[]
Penetration: pass[] fail[]

UNACCEPTABLE

Cracks: pass[] fail[]
Undercut: pass[] fail[]
Pin holes: pass[] fail[]
Overlap (cold lap) pass[] fail[]
Porosity (surface): pass[] fail[]
Coloration: pass[] fail[]

Qualifier David Aural Date of Test Coupon 2.05.09

Welder Barclay Elliott Date of Test Coupon 12.05.09

The above named individual is qualified in accordance with AWS D17.1.2001 to weld